Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-35. (cancelled)

36. (new): A vapor deposition effusion system, comprising:

a device configured to translate a strip material through a deposition zone and along a processing path, each of the strip material and the deposition zone having a width oriented perpendicular to the processing path and a length oriented parallel to the processing path; and

first and second substantially closed vessels located serially along the processing path, each vessel containing a heated quantity of a different source material, the first and second vessels being configured to produce overlapping plumes of the different source materials in the deposition zone, each vessel including an array of vapor delivery nozzles distributed uniformly across the vessel in a direction corresponding to the width of the deposition zone and configured to expel overlapping plumes of source material, so that a fog of source materials is created and deposited on the strip material in the deposition zone, the fog having a substantially uniform composition across the width of the deposition zone and a varying composition across the length of the deposition zone.

37. The system of claim 36, further comprising

a heating system adapted to maintain the nozzle at a temperature higher than the source material.

38. The system of claim 36, further comprising

at least a third substantially closed vessel located serially relative to the first and second vessels along the processing path in the deposition zone, the third vessel containing a different composition than the first and second vessels.

39. The system of claim 36, wherein the source materials are selected from the group comprising copper, gallium, and indium.

40. The system of claim 36 further comprising a thermal control shield disposed at least partially around the vessel.

41. The system of claim 37, wherein the thermal control shield includes an outer shell and plural insulation layers.

42. The system of claim 38, wherein the outer shell is formed of one or more materials chosen from the following group: graphite, boron nitride, tantalum, molybdenum, tungsten, rhenium and titanium.

43. The system of claim 39, wherein the outer shell is ceramic coated.

44. The system of claim 36, wherein the vessel includes plural spaced-apart vapor delivery nozzles.

45. The system of claim 41, wherein the nozzles are disposed along an elongate axis configured to expel overlapping plumes of source material, whereby a fog of source material of substantially uniform flux along the elongate axis is created.

46. The system of claim 41, wherein the vessel is constructed of materials chosen from the group consisting of graphite, pyrolitic boron nitride coated graphite, tantalum, molybdenum, tungsten and ceramics.

47. The system of claim 36, wherein the vessel includes a crucible and a lid, wherein the at least one vapor delivery nozzle is positioned in the lid.

48. The system of claim 47, wherein the at least one nozzle is integrally formed into the lid.

49. The system of claim 47, wherein there are plural nozzles positioned on the lid.

50. The system of claim 49, wherein the nozzles are spaced apart between 1 and 20 centimeters.

51. The system of claim 47, wherein the heating system includes an electrical heating element disposed in the lid.

52. The system of claim 51, wherein the heating element disposed in the lid is generally U-shaped.

53. The system of claim 47, wherein the heating system is adapted to maintain the lid at a temperature higher than the source material.

54. The system of claim 36, wherein the at least one nozzle has a discharge opening between 0.25 and 2.5 centimeters in diameter.

55. The system of claim 36, wherein the heating system includes at least one U-shaped heating element.

56. A vapor deposition system, comprising:

a roll assembly configured to translate a strip material through a deposition zone and along a processing path, each of the strip material and the deposition zone having a

width oriented perpendicular to the processing path, and a length oriented parallel to the processing path;

first and second crucibles arranged serially along the processing path to produce overlapping plumes of different source materials, each crucible having a lid;

each crucible having at least one nozzle in the lid to pass vapor evaporated from molten source material contained in the crucible; and

each crucible having a source material heating system to control the temperature of the source material at a desired temperature range;

wherein the roll assembly is configured to maintain a substantially constant travel speed of the strip material through the deposition zone in relation to the temperature of source material in the crucible, such that source material of substantially uniform flux is created and deposited on the strip material.

57. The system of claim 56 further comprising a nozzle heating system adapted to maintain the nozzle at a temperature above the temperature of the constituent material.

58. The system of claim 57, wherein the nozzle heating system is configured to maintain the lid at a temperature above the temperature of the constituent material.

59. The system of claim 56, wherein in the nozzle is sized to constitute the rate limiting factor in effusion of the vapor.

60. The system of claim 56, wherein the nozzle has an opening area between 0.05 and 5 square centimeters.

61. The system of claim 56 further comprising a thermal control shield at least partially surrounding the crucible.

62. The system of claim 56, wherein the thermal control shield includes an outer shell and thermal insulation.

63. The system of claim 56, wherein the crucible is constructed from materials chosen from the following group: graphite, pyrolitic boron nitride coated graphite, tantalum, molybdenum, tungsten and ceramics.